IMPROVED METHOD AND SYSTEM FOR A BUILDING DATABASE MANIPULATOR

ABSTRACT OF THE DISCLOSURE

A Building Database Manipulator to build databases for a variety
of physical environments including definitions of buildings, terrain and
other site parameters, by scanning in or rapidly editing data. Raster scans
may be entered or object files in various formats may be used as input.
Detailed information is stored in the drawing database about the object's
location, radio frequency attenuation, color, and other physical information
such as electrical characteristics and intersections of the object with the
ground, floors, ceilings, and other objects when objects are formatted in a
drawing. The formatting process is strictly two-dimensional in nature, but
the resulting drawing is a true three-dimensional environment. The user
sees the three-dimensional building structure by altering the views. The
resulting database may be used in a variety of modeling applications, but is
especially useful for engineering, planning and management tools for
in-building or microcell wireless systems. Grouping objects in layers
allows for simultaneous conversion of all objects in one layer to have
certain predetermined attributes (e.g., converting objects to be made from
glass versus cement; converting objects within a layer to have a uniform,
smaller or larger, height or width dimension).